

REMARKS

I. Introduction

In response to the pending Office Action, Applicants have amended claims 22, 24, 25, 27, 28, 30, 32, 34, 35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53 and 55 and cancelled claims 19, 21, 56 and 58, without prejudice. Claims 32 and 34 have been rewritten in independent format. Support for the amendments to claims 22, 24, 25, 27, 28, 30, 32, 34, 35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53 and 55 may be found, for example, in original claims 56 and 58. No new matter has been added.

A Request for Continued Examination is being filed concurrently with this Amendment.

For the reasons set forth below, Applicants respectfully submit that all pending claims are patentable over the cited prior art.

II. The Rejection Of Claims 19, 21, 22, 24, 25, 27, 28, 30, 32, 34, 35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53, 55, 56 and 58 Under 35 U.S.C. § 102 and 103

Claims 19, 21, 22, 24, 25, 27, 28 and 30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Fujishita et al. (U.S. Pub. 2002/0027415). In addition, claims 32, 34, 35, 37, 38, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53, 55, 56 and 58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujishita et al in view of Zhang et al. (USP No. 6,110,619). As claims 19, 21, 56 and 58 have been cancelled, and claims 22, 24, 25, 27, 28 and 30 have all been amended to be dependent upon newly amended claims 32 and 34, the § 102 rejections are considered moot. Applicants submit that all pending claims are patentable over the cited prior art for at least the following reasons.

With regard to the present invention, claims 32 and 34 recite, in-part, a secondary battery, comprising a positive electrode, a negative electrode and an electrolyte, wherein at least one of said positive electrode and said negative electrode includes an electrode active material having a structure represented by the general formulae (1a) or (2) shown above, in the respective claims.

The Examiner alleges that the electroluminescent device as taught by Fujishita is equivalent as an electrochemical device taught by the Applicant. However, all of the pending rejected claims, as amended, recite a secondary battery, which is not equivalent to the electroluminescent device of Fujishita. It is well known that electroluminescent devices are not equivalent, and constitute non-analogous art to that of secondary batteries. Accordingly, the Applicants submit that Fujishita is not a valid prior art reference.

Furthermore, the Examiner alleges that while Zhang et al. fails to disclose the compounds of the present invention, Fujishita et al. teaches the use of the above disclosed compounds and the compound's capability of providing a long life to electrochemical devices. In contrast to the Examiner's allegations, Fujishita teaches an organic **electroluminescent** device in which the compounds are contained in the **hole-injecting layer** into which light is emitted by injecting an electron and a hole into an organic luminescent layer (see, paragraph [0002]). Thus, Fujishita does not disclose that the compounds represented by the formula 1a or 2 of the present invention are used as an active material of a secondary battery or that they improve the cycle characteristics and the rate characteristics of a secondary battery.

Moreover, even if the references could be combined, there is no teaching or suggestion to do so. Applicants direct the Examiner to MPEP § 2143.01 entitled, "Fact That References Can Be Combined Or Modified Is Not Sufficient To Establish Prima Facie Obviousness" which

states, “Although a prior art device may be capable of being modified to run the way the apparatus is claimed, ***THERE MUST BE A SUGGESTION OR MOTIVATION IN THE REFERENCE TO DO SO.***” *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). Nowhere in the cited prior art references is there any suggestion or motivation to combine a compound used in an electroluminescent device with a secondary battery. Thus, as there is no suggestion or motivation in either of the cited prior art references to use the compounds disclosed in Fujishita in the electrochemical cells of Zhang, and as the two prior art references are non-analogous to each other, the combination of the two references is improper.

“In order to rely on a reference as a basis for rejection of Applicant’s invention, the reference must either be in the field of Applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *In re Oeticker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

Fujishita is directed to a non-analogous art (organic electroluminescent devices). Thus, Fujishita is not in the field of Applicant’s endeavor, secondary batteries, and is not reasonably pertinent to the problem with which the inventors were concerned, improving cycle characteristics of secondary batteries. Thus, Fujishita provides no motivation to substitute the compounds of Formula 1(a) and 2 into the electrochemical cells of Zhang.

As is well known, in order to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art, *In re Royka*, 180 USPQ 580 (CCPA1974), and as Zhang and Fujishita both fail to teach or suggest a secondary battery, comprising a positive electrode, a negative electrode and an electrolyte, wherein at least one of said positive electrode and said negative electrode includes an electrode active material having a

structure represented by the general formulae (1a) or (2), it is submitted that Zhang and Fujishita, alone or in combination, do not render claims 32 and 34, or any claims dependent thereon, obvious.

III. All Dependent Claims Are Allowable Because The Independent Claim From Which They Depend Is Allowable

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claims 19, 20 and 21 are patentable for the reasons set forth above, it is respectfully submitted that all pending dependent claims are also in condition for allowance.

IV. Conclusion

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication of which is respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

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including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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